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CLASSROOM METHODS AND DEVICES

Corn and Its Products

A SERIES OF LESSONS IN HOME ECONOMICS GIVEN TO THE FIFTH GRADE OF THE ELEMENTARY SCHOOL OF THE UNIVERSITY OF CHICAGO

A study of the growth of Indian corn and of the many uses to which different parts of the plant are put forms one of the principal topics for study in natural science during the second half of the fifth school year. Previous work in institutional history has familiarized the child with the large part Indian corn played in the earliest American households. His interest in the raising of corn and in many of the products which are made from it is further enhanced by the fact that quite a number of these same products are readily prepared in the laboratory. It is also possible to obtain a large amount of free or inexpensive illustrative material which helps to emphasize to him in a concrete way the important part which corn plays in many present-day industries. For these reasons and because the average family is concerned in so many ways with corn and its products I have developed a series of twenty-six lessons using corn as a basis.

To prevent needless duplication, that part of the course on corn which can be taught most readily in the foods laboratory is given by the teacher of home economics and omitted by the teacher of elementary science. In the accompanying sample pages from the fifth-grade general science outline the problems starred are some of those carried out by the teacher of home economics, the conspectus given in this article indicating the plan followed.

The class to which this series is given meets twice each week, a half-hour recitation period being followed after several days by a laboratory period of an hour. Any new topic is usually discussed in the recitation period and a proper course of action decided upon; this is carried out in the following laboratory period. Sometimes a second recitation period is needed to finish a given discussion or laboratory exercise. Rarely is anything done in the laboratory which has not been talked over in the class and a suitable method of procedure arrived at by the children and the teacher. A sufficient number of lessons is worked out in this article to indicate the method pursued.

SELECTED TOPICS IN A SPECIAL ELEMENTARY SCIENCE COURSE

FIFTH GRADE

A. Study of Starch and Starchy Foods

I. Problem: *What are some of the properties (peculiarities) of starch? What can we find out about it?*
  A. Hand pupils pieces of common starch, chalk, salt, and sugar.
    1. *Color* of starch. Compare with chalk. Mark on board with both.
    2. *Hardness.* Scrape; drop on desk; break.
    3. *Brittleness.* Rub between fingers—powders with a crackling noise.
    4. *Solubility.* Compare with salt and sugar.
      a) Drop sugar and salt in water. Dissolves.
      b) Drop starch in water. Sinks. Why?
      c) Crush the starch in water—thick, milky, opaque solution. Why? Set it aside.
      d) Pour boiling water on starch, a little at first. Add more, stir. Does starch dissolve?
      e) Do the cold and hot starch solutions become clear on standing?

II. Problem: *How can you tell starch from other substances?*
  A. Have pupils make a pasty solution of starch and add a few drops of *iodine* to a part of it. Makes it blue.
  B. Test some chalk, salt, sugar with iodine.

*III. Problem: *Can we turn starch into any other substance?*
  A. (1) Test some cooked starch paste with *iodine.* Combine 1 cup water, 1 tablespoonful cooked starch paste, and 1 teaspoonful con. HCl. Cook to a *syrup,* keeping up the volume of H_2O. If still acid, add a little alkali to neutralize.
    (2) Syrup is made from what part of the corn grain? How?

*IV. Problem: *What test can we make to be sure we have sugar?*
  A. Put some syrup in a test tube, 1 teaspoonful, add ½ teaspoonful each of Fehling's solution I and II, boil till red precipitate appears.
  B. Put some of the sweet substance from Problem III with Fehling's solution I and II and boil. Result?

*V. Problem: *Are starch and sugar present in any vegetables and fruits used for foods?*

A. *Assign raw foods to test and tabulate results as follows:*

Food	Starch	Sugar
Corn grain..........		
Potato..............		
Flour...............		
Apple...............		
Banana..............		
Orange..............		
Beet................		
Carrot..............		

OUTLINE OF LESSONS ON CORN

FIFTH GRADE

1. Fresh corn
   A. Forms
      a) Whole grains
      b) Pulp
   B. Dishes
      a) Scalloped corn
      b) Cream of corn soup
2. Dried corn
   A. Whole grains
      a) Lye hominy
         (1) Preparation
         (2) Conversion into samp, grits
   B. Ground grain—cornmeal
      a) Preparation of dishes—corn cakes, muffins, mush
      b) Starch
         (1) Preparation, identification
         (2) Identification in other food materials
         (3) Uses in household
         (4) Products
            (*a*) British gum or dextrin
               1) Preparation
               2) Identification
               3) Uses (sizing cloth and paste-making)
            (*b*) Corn syrup or glucose
               1) Preparation
               2) Identification
               3) Uses (sweetening and candy-making)

The preliminary recitation periods are used to examine carefully the corn grain, both dried and soaked, to learn the color, size, shape, and hardness, and to identify the parts of the grain. A hand lens is used during this study. The names and locations of parts of the grains are considered, both individual and blackboard drawings being used to point the discussion. Each child soaks some of the

PLAN OF RECITATION AND LABORATORY PERIODS

RECITATION PERIODS, ½ HOUR EACH; FOLLOWED BY LABORATORY PERIODS, 1 HOUR EACH

1. Examination of corn grain.	Cooking of fresh corn grains whole—scalloped corn.
2. Continuation of recitation one.	Cooking of fresh corn pulp—cream of corn soup.
3. Preparation of lye hominy.	Preparation of cormeal from whole dried grain. Collection of samples for a permanent exhibit.
4. Continuation of recitation three.	Examination of soaked corn grains. Preparation of hominy, samp, and grits. Collection of samples of above for permanent exhibit.
5. Oral review.	Preparation of dishes from cornmeal—mush.
6. Extraction of starch from cornmeal. Identification of starch.	Identification of starch in other foods.
7. Tabulation of results from laboratory six.	Preparation of dishes from cornmeal, *continued*—corncakes.
8. Examination of raw and cooked starch to find its physical properties.	Utilization of physical properties of starch in preparation of cornstarch pudding.
9. Production and utilization of British gum or dextrin.	Preparation of dishes from cornmeal, *continued*—corn muffins.
10. Discussion of process of converting starch to syrup.	Preparation of corn syrup from cornstarch.
11. Identification of syrup in other foods.	Completion of laboratory ten and final tabulations.
12. Oral review of recitation and laboratory ten.	Preparation of candy from Karo.
13. Planning of breakfast or luncheon from corn.	Preparation and serving of meal.

dried grains in a lye solution as the first step in the preparation of lye hominy. After several weeks of soaking, a laboratory period is devoted to the removal of the hull from the grains, which are then washed repeatedly and dried in a slow oven (125° C.) to make hominy.

The laboratory periods paralleling these first recitations are occupied, first, with the preparation of dishes from fresh corn in its various forms, and, secondly, with the preparation of the various forms of dried corn found on the market. In the first case fresh corn on the cob should be used. These lessons are given each year in October and February. At such seasons fresh corn is a financial impossibility, even with unlimited resources and a city market on which to depend. As a substitute for fresh whole grains, canned corn is used, while canned kornlet takes the place of the pulp of the fresh grain. Scalloped corn and cream of corn soup are the dishes prepared. In the second case the dried grain is converted into samp, grits, and cornmeal. An old-fashioned "coffee mill" is used for the grinding, the coarseness of the adjustment and the subsequent siftings governing the character of the finished product. The meal made is utilized in the preparation of typical cornmeal dishes, mush, corncakes, and corn bread. The supply of cornmeal is replenished as needed by the grinding of additional grain.

The following recitation periods are occupied in the extraction of starch from some of the ground meal and in the making of certain products derived from it. The identification test for starch and its application to a large number of other food materials always proves an interesting problem and gives rise to a consideration of possible methods of recording data. During a laboratory period the physical characteristics are studied and its thickening power further illustrated by the preparation of cornstarch pudding.

The products derived from starch which are considered in this course are British gum and glucose. Glucose is readily prepared in the laboratory by using a pressure cooker. A small quantity of starch cooked to opalescence is cooked under twenty pounds' pressure until it will respond to the test used for sugar or glucose. The test is usually given after a half-hour's cooking. This same result may be achieved by means of the addition of a small amount of acid to a starch paste which is cooked in an evaporating dish until the desired response is given.[1] A fair imitation of commercial British gum is made by drying out starch washed from the ground grain until it is light brown in color. A small amount of this material when ground to powder and combined with water is quite sticky in character. Its power to stiffen fabrics is illustrated with a piece of cloth which is dipped in the solution and dried.

In order to emphasize in a more concrete way the use of corn as a food material the final recitation and laboratory periods are used for the preparation and serving of either a corn breakfast or a corn luncheon. So far as possible the dishes served are made from corn or contain some corn product. The class composes, writes, and delivers the invitations to the guests.

TYPICAL RECITATIONS AND LABORATORY LESSONS

One of the recitations and one of the laboratory lessons as actually carried out in the classroom are given to illustrate the method used in presenting this material.

Recitation 6

"Of what did we find the corn endosperm is largely composed?" (Starch.) "If I gave you some of the endosperm of a grain how could you prove that it contained starch, Mary?" (By looking at it.) "How would you know that it was not powdered sugar?" (By tasting it.) "How would you know it was not chalk?" This usually carries the question outside the experience of the child and the instructor says that she knows a substance that has a peculiar effect on starch and holds up a bottle of a dark-brown fluid. "What effect has this liquid on starch, class? Please come around the table. Put some of this material on this cornmeal, James. What change has taken place?" (Turned blue.) "What is the effect of this substance on the starch? What is the name of this substance?" The children have already spelled it out from the label and have made more or less successful attempts to pronounce it. The instructor writes it on the board and marks it for pronunciation.

"Who knows how to prove the presence of starch in a material?"

"Tell us how you would test for starch, Mary?"

"Put some of the iodine on your desk, George. What have you proved?" (The absence of starch.)

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[1] During one laboratory period candy is made from the ordinary market form of glucose, Karo corn syrup.

"We shall need some of the starch from corn very soon, so I shall ask you to separate it from the grain in this way:

"Measure ½ cup of cornmeal. Pour it on a square of cheesecloth and tie the cloth in the form of a bag. (One of the class demonstrated with materials at the instructor's desk.) Pour one cup of cold water over the bag of meal in a bowl. Work the bag with your fingers until the water is milky white. Throw the bag in the waste can. Pour the contents of the bowl in a glass jar. Label the jar with your name and set it on the demonstration table."

The directions were rehearsed by the class until they were clear and then were put into effect. When the cans were all on the table the children were told to put some of the iodine in the bottoms of their bowls. Immediately the presence of starch in the remaining water was evident.

"Do you know any other foods which contain starch, class?" Various responses were made and the question was left undiscussed to pave the way for the next laboratory lesson. The desks were put in order for inspection.

Laboratory 8

"Name several properties of starch, Helen." (It is dry, white, tastes chalky, etc.)

"What are the properties of starch which we discovered in our last lesson?" (It is insoluble in cold water, and it makes water thick when cooked with it.)

"How much starch did we need to make ¼ cup of water very thick when cooked with it?" (½ tablespoon.)

"At that rate, how much starch will we need to thicken 1 cup of water very thick?" (2 tablespoons.) "1 cup of milk?" (2 tablespoons.)

"In the latter case what might we call the cooked mixtures?" (Cornstarch pudding.)

"Would you care for the taste of the pudding?" "How might we improve it?" (By adding sugar and some flavoring.)

"What flavoring do you suggest?" (Cocoa.)

"Make your own recipe, class, starting with one cup of milk."

The instructor wrote the list of ingredients and the amounts of each as the recipe was formulated by the class, referring again to the thickening experiment when the class hesitated over the amount of cornstarch needed.

Milk	1 cup
Cornstarch	2 tablespoons
Sugar	2 tablespoons
Cocoa	1 tablespoon

"Why are we using sugar, Mary?" "Cocoa, John?" "Cornstarch, Jane?"

"When does cornstarch thicken liquids, class?" (When it is cooked with them.)

"How shall we thicken this pudding?" (By cooking it.)

"Into what classes may these ingredients be divided, Joe?" (Liquid and dry.)

"What is the simplest way to combine them, Mary?" (Combine the liquid ingredients with the combined dry materials and stir out the lumps.)

"In what utensil shall we cook this pudding?" (In the double boiler.)

"Why, class?" (To prevent burning the milk.)

The instructor told the class to stir the pudding constantly until it had become very thick and then, covering the pan, to let it cook for twenty minutes, stirring frequently.

"How shall we serve this pudding, class?" (In the white bowls, laying the place as usual.)

"What utensils are needed for measuring these ingredients, class?" (Enough answers were given to secure a correct list.)

"While the puddings are cooking, please see that your desks are in order and reline the drawers with clean paper. Let me see the puddings when you are ready to serve them."

"The class carried out its work as indicated and washed the remaining utensils after the puddings had been served.

A very interesting collection of illustrative material was made by the class in connection with this study. The largest part was secured in response to letters sent to the federal Department of Agriculture at Washington, to the Postum Cereal Company at Battle Creek, Michigan, and to other private corporations interested in the manufacture of products from corn. The government issues a number of bulletins and pamphlets which contain printed matter and illustrated material which have value in this study.

The Postum Cereal Company sent very interesting illustrative material, among which was an exhibit of the various stages through which corn passes in the manufacture of corn flakes. The American Manufacturers' Association of Products from Corn has been very kind in its response to our repeated requests. It has sent us at various times bottled samples of its output, as well as much available reading-matter. Sending the requests for these materials and acknowledging their receipt formed the basis for a number of exercises in the writing of business letters.

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ENGLISH FOR PREVOCATIONAL BOYS—*Concluded*

READING FOR INFORMATION

It is a matter of easy transition from reading merely for entertainment to reading for information. The daily hour set aside for silent reading may readily develop into a period of supervised study. The first essential of such a transition is co-operation between the teacher of English and the teachers of the other subjects, if such subjects are taught departmentally.

This co-operation with the other teachers makes a peculiar demand on the teacher of English in a prevocational class. He may be permitted to be a specialist so far as the reading for entertainment and the reading for aesthetic appreciation are concerned, and even in the realm of written and oral expression he may be allowed to do some work in English "for the sake of English," but he must acquire an interest in the subject-matter of all the other studies. In time he should become conversant with the more important literature used in the courses in history, civics, science, hygiene, and shopwork. He cannot say, "It is my business to know and to teach English." It must be his recognized duty to teach the pupils how to *use* English in any department of their school work.

Where the same teacher is teaching history and English, for example, there are times when it would be difficult to say whether certain work was being done as history or as English. Because of the teacher's common interest, the two subjects have been correlated naturally. The same kind of correlation should be sought when the work is done by different teachers. Where the reading-material has been listed, as in the case of hygiene and history in this series, such co-operation is a relatively simple matter provided the entire work of the class has been co-ordinated by one person and the several teachers understand the plan and the principles involved.

As examples of such correlation the following concrete illustrations are given.

The teacher of history has discussed with the class the subject of the evolution of tools from the crude forms as used by primitive man to the modern complicated machine tools. The hammer has been chosen as an example, beginning with the crude stone, bound with thongs to the end of a stick, and ending with the steam and pneumatic hammers. The time which can be appropriately devoted to this phase of history has been consumed, but the teacher of English may well utilize the interest which the boys now have in this subject by giving them such reading-matter as "The Saw in History."

Or let us suppose that the teacher of physiology has told briefly, in a lesson on anatomy, the story of Atlas in connection with the mention of the second vertebra, or has referred, in a discussion on the muscles, to the tendon of Achilles. Experience has shown that even this slight introduction has served amply to open the way for the teacher of English to present Hawthorne's charming tales from the Greek myths or to lead delightful excursions into the classic realm of the heroes of Greece and Troy.

The shop also suggests subjects for work in English. While any intensive study of the larger industries belongs in the main to the department of history, still there are many related social and industrial questions of which the English department must take account. By co-operating with the teachers of shopwork and history, the English department will find ample material relating to such subjects, for example, as the production of iron, steel, coal, and lumber.

In addition to utilizing the reading-material in other subjects for the purpose of teaching the pupils how to read for information, some special talks may be given to show the children something of the utility of books in general, and of the extent to which they enter into the practical work of the civilized world. Things that are matters of such common knowledge to us as to seem obvious are frequently overlooked by them. We comprehend, for example, that books serve a great variety of purposes and that there are few problems presented by life to the solution of which the printed page may not have something to contribute. How may the pupils be led to a similar appreciation?

Children are almost always interested in hearing about the history of iron and steel, and of the workings of the great factories in which such material is made into products for the market. Such recitals as these are thought to be especially appropriate for prevocational classes, yet it is an open question whether they are more appropriate or more interesting or more valuable to the average prevocational child than would be the history of books and a description of the workings of some large public library. The library is, in fact, a huge machine, and the librarian and his assistants know how to operate it. To them the library is not the awe-inspiring and incomprehensible thing that it is to the average child. The children would not feel so helpless in the presence of thousands of volumes if they knew something of the principles of classification and cataloguing. They should learn how an assistant librarian can pick out, from the mass of reading, the little piece of information for which the reader happens to be searching.

By merely naming, or by informally discussing, just a few of the classifications, the teacher can open new worlds to some of the children. Take, for example, the following as illustrative and think what any teacher may tell the children that will prove both interesting and instructive and that may result in exciting a curiosity about books.

CLASSIFICATION

Fiction
Biography
History
Travel
Art
The Drama
Civics
Politics
Science
Engineering
Mechanics
Encyclopedias

A few facts about some of the world's great libraries; the knowledge that ancient libraries were only for the great and powerful and could be used only by great scholars; a brief statement of the development of the American plan of free, municipal, *circulating* public libraries—these and other similar topics are quite as interesting and quite as appropriate for industrial classes as the story of iron and steel, and it is believed that some acquaintance with such facts will convince the children that books are indeed useful and valuable things.

It will also be of interest and somewhat of a surprise to many children to learn that some manufacturing concerns maintain libraries of their own and employ a librarian. At first thought there may seem to be little connection between a factory and a library, but a little reflection will show the boys that modern industry makes so many demands on science, art, and mechanics, and on other related or contributing industries, that it is desirable to have all the educational material possible ready at hand for both employer and employees.

Any teacher who has the right point of view can find countless opportunities for bringing to the attention of the children the great *utility* of books.

ENGLISH FOR EXPRESSION

While the development of verbal expression, both oral and written, is a legitimate purpose of prevocational English, it should be admitted that this is of far less importance than the quickening of the pupils' powers of acquisition. It should also be said that, of the two, oral expression is of far more value to these boys than written composition.

While of secondary importance, the development of ready, accurate verbal expression should not be overlooked entirely. Some instruction, therefore, must be given in penmanship, composition, and spelling, and possibly in reading aloud for intonation and expression, but the prevocational teacher must not fail to see this work in its proper perspective. There is nothing more disheartening than to see a teacher of prevocational boys proceeding in his instruction with the same undue emphasis on the unessentials that resulted so disastrously with these very children while they were in the grades. Undoubtedly it would be better to eliminate this whole phase of English, for these boys, than to overemphasize it at the expense of the reading for entertainment, for information, and for inspiration.

Writing.—Little formal instruction should be given in penmanship in the prevocational class. The personal criticism of all written work, together with occasional study of excellent examples of penmanship, should result in any needed improvement in the formation of letters.

An incentive for a little exceptionally good or careful writing may be provided in various ways. One such expedient is to have each boy keep a "Rule Book," in which is written, from time to time, directions, suggestions for work, or other matters which the teacher wishes to have in the boys' hands ready for immediate reference, such, for example, as rules for self-management in school, and rules for sanitation and hygiene in school or home. Some of the notebook work, the copying of poems and of selected prose extracts, and the work on the card index previously mentioned may be cited as means of securing improvement in penmanship.

Spelling.—The time available is too limited to permit of developing spelling as a subject. Undoubtedly individual attention should be given to desperately bad cases in order to discover if there is some special cause for this condition which can be readily corrected. Such cases have been discovered and materially improved. Here, also, the most appropriate method is that of personal criticism and suggestion. Spelling-lessons should preferably be informal and should rarely include spelling aloud. Word-study, which can be made picturesque or dramatic, and which can be introduced informally, will serve the double purpose of improving the spelling and of providing another opportunity for the development of oral expression. As an example of words which may be studied in this way the following are suggested:

good-by—contraction of "God be with you."
dahlia—from name of Swedish botanist, Dahl.
macadamize—from name of Scottish engineer, John Louden MacAdam.
boycott—from name of first victim of that system.
derrick—from name of London hangman of seventeenth century.
thimble—from Anglo-Saxon *thuma*, "thumb."
alphabet—from Greek *alpha* and *beta*.
school—from Greek *scholē*, meaning "leisure."
sarcasm—from Greek *sarx*, meaning "flesh."
nausea—from Greek *naus*, meaning "ship."
aviation—from Latin *avis*, meaning "bird."
dextrous—from Latin *dexter*, meaning "right."
sinister—from Latin *sinister*, "left," as opposed to *dexter*, "right"; whence the meaning of "ill omen," "bad."
tantalize—from Greek myth of Tantalos.
rival—from Latin *rivales*, "near neighbors"; *rivus*, "river"; and so struggle among people for habitation on river banks developed the word "rival."
tariff—from Spanish promontory, Tariffa, once inhabited by Moors.

Other expedients found useful are:

Dictation with immediate correction of misspelled words in class, corrections being made by the boys themselves. They may report on their *improvement* from day to day, not on the percentage of failures.

Study of list of words collected from shop and other classes by the boys.

Occasional reference to published lists, such, for example, as that compiled for the vocational class of Swift & Company, Chicago, familiarly known as the *Swift Speller.*

Dictionary work, conducted *in school time,* as a class exercise, is valuable.

Oral reading.—It is difficult to conceive of any good reason why oral reading should ever be given as a class exercise in a prevocational school, but the practice is so common that some consideration must be given to the question.

Experience would go to show that it is worse than a waste of time to have the members of a class sit and listen to desperately bad readers struggling painfully through sentence after sentence, the import of which is already a matter of common class knowledge since the book is under the eyes of all. If the oral reading were of excellent quality something might be learned by imitation, but as it is, the listener acquires little or nothing but distaste for the whole proceedings and the reader is in even a worse plight since he is keenly conscious of his failure to entertain or enlighten either himself or his listeners. Whatever may be the teacher's purpose for such practice, it is impossible to discover any actual accomplishment which can be called worthy. Oral reading may serve an excellent purpose in prevocational education, but that phase of English will be discussed in another place.

Technical grammar.—Technical grammar has no place in prevocational work except in its most elementary form. The ability to recognize in a sentence a noun, a verb, an adjective or an adverb, the subject or the predicate, is about as far as grammar should be carried as a subject. Even this attempt at sentence analysis should be discontinued unless there is unmistakable evidence that the interest is genuine, and that the work actually contributes to the pupils' ability to express themselves more clearly and concisely.

ENGLISH AS AESTHETIC TRAINING

It must not be assumed because prevocational pupils are backward in school that they are lacking in the capacity for aesthetic enjoyment. There is frequently a hunger in the hearts of these children which none of the so-called practical work can satisfy. English offers an opportunity to minister to this need, and perhaps oral reading will afford the best approach. This reading, however, should be done mainly by the teacher or by excellent readers drawn from other departments of the school.

The ability to listen with pleasure to good reading is almost universal. Most adults have vivid recollections of things read to them in childhood, frequently with no intention that they should be retained, but which have been of lasting inspiration and benefit to them. Ordinarily the teacher, under the stress of required work, does not feel at liberty to take the time for giving to the children a series of these pleasurable recollections. In the prevocational class in English this should be an important part of the regular program.

In addition to listening to oral reading, the pupils should read for themselves, should copy in their notebooks, and occasionally should commit to memory, examples of good literature. While some of the longer literary works may come within the capacity of an occasional pupil, for the large majority short extracts and adaptations from these works, and quotations from both prose and poetry will be found preferable. These may well be selected to engender a respect for labor. It cannot be denied that literature has sung mainly the praises of the great and powerful, but tributes to the humbler workers are not wanting. The teacher who searches sympathetically will find ample material. As illustrative of this material and as indicative of variety in authorship, the following quotations are selected from a mass of such examples employed in prevocational classes:

> No man is born into the world whose work
> Is not born with him; there is always work,
> And tools to work withal, for those who will,
> And blessed are the thorny hands of toil!
> The busy world shoves angrily aside

The man who stands with arms akimbo set,
Until occasion tells him what to do:
And he who waits to have his tasks mapped out
Shall die and leave his errand unfulfilled.—LOWELL

ALL WORK

All true work is sacred; for in all true work, were it but true hand-labor, there is something of divineness. Labor wide as the earth has its summit in heaven.—CARLYLE.

THE PRIZE OF LIFE

Genial manners are good, and power of accommodation to any circumstance, but the high prize of life, the crowning fortune of a man is to be with a bias to some pursuit, which finds him in employment and happiness—whether it be to make baskets, or broadswords, or candles, or statutes, or songs.—EMERSON.

The world is at its best. I feel
  A triumph in the work I do.
With every turning of the wheel
  I add a little that is new.
The masses shapeless through the past,
  I, even I, give shape. I bring
From silent uselessness at last
  The pleasing useful thing.
All that has been since the first light
  Shot out across the gulfs of space,
Was that my crowning labor might
  Put something in its ordered place.
The sound the toiling thousands make
  Is earth's sublimest symphony,
And I, a worker, proudly take
  The part assigned to me.—KISER

ALWAYS

Honest labor bears a lovely face.—DEKKER

LAW OF LIFE

"Labor the law of life," that is your creed;
 Once it was true that art meant only grace,
"A pretty flower this is," "A glorious face,"
 Men said, and so interpreting, did heed
 No higher call than came from shepherd's reed;
 Brawny arm was for the warrior's mace,
 The supple limb was for the champion's race,
 But higher, better things were lost in deed!

Now, in this newer day, what change is wrought!
We know the law of life is labor; so
The hand and mind in unison are taught,
With each the other's ready servant. Lo!
What a grand world will swing beneath the sun
When Heart and Hand and Mind are all in one!

—MEREDITH NICHOLSON

A MAN'S WORK

In the morning when thou art sluggish to rouse thee, let this thought be present: "I am rising to a man's work."—MARCUS AURELIUS.

Thus it will be seen that the work in English, even in prevocational classes, offers wide opportunity for the presentation of much that is inspirational. It will be a sorry day for education if the schools admit that inspirational literature is mainly for the few and that the only training needed by the workers is in the so-called practical phases of industrial education. Rather should such literature be brought to light as will help to raise humble work out of its commonly sordid and unpoetic relations and touch it with the magic of idealism.

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